

SOI/BULK HYBRID SUBSTRATE AND METHOD OF FORMING THE SAME

ABSTRACT

A semiconductor device having areas that are semiconductor on insulator (SOI) and areas that are bulk (12), single crystalline semiconductive areas (16) is provided in which conductive spacers may be formed to electrically connect the SOI areas to ground in order to overcome floating body effects that can occur with SOI. Additionally, insulative spacers (14) may be formed on the surface of the conductive spacers to electrically isolate the SOI regions from the bulk regions (12). A novel method for making both of these products is provided in which the epitaxially grown, single crystalline bulk regions need not be selectively grown, because a sacrificial polishing layer (20) is deposited, is also provided.

Fig. 5